DELAWARE TOXICS RELEASE INVENTORY
DATA SUMMARY

2004

Prepared by the

Department of Natural Resources and Environmental Control

March 2006

2004 TRI DATA SUMMARY

TABLE OF CONTENTS

A MESSAGE FROM THE SECRETARY

The Department of Natural Resources and Environmental Control is pleased to present the Toxics Release Inventory (TRI) Report for the reporting year 2004. In Delaware, TRI reports for 2004 show that total TRI-reportable waste, including on-site releases, transfers off site, and on-site waste management, has declined five out of the last six years. From 2003 to 2004 the decline was 3.5%, or 3.4 million pounds, and since 1998 the decline is 39%, or 60 million pounds. Although on-site releases reported under TRI were higher by 8% when compared to 2003, they were lower by 13% compared with 1998. The increase in reported on-site release amounts largely reflected electricity production. Therefore, energy production can have an effect on the environment, and we encourage both industry and the public to do their share to help preserve the environment through greater energy efficiency. Also, some facilities changed to more accurate methods of estimating amounts in their reports. Although reported amounts increased in some cases, we are pleased to see that facilities are continually improving the accuracy of their reporting methods while at the same time reducing overall TRI waste. In sum, reporting accuracy is up, while the total long-term trend in TRI waste is down.

We publish two TRI reports. This report was developed in response to requests for a more compact, less technical report. The more technical 2004 TRI Data Detail Report, this Data Summary Report, and reports for recent years are available at DNREC offices and also through the public information link at http://www2.state.de.us/serc/public.shtml#facilinfo . Specific facility data from 1995-2004 are also available at the above web site in an easy-to-use searchable format.

Even though TRI does not mandate reductions of toxic chemical releases or issue permits for chemical releases, TRI reporting has motivated companies to significantly reduce their emissions. Similarly, the TRI information allows the public to understand that the choices made by individual citizens can result in environmental impacts—both directly and indirectly—such as the role of energy efficiency and chemical emissions from power plants.

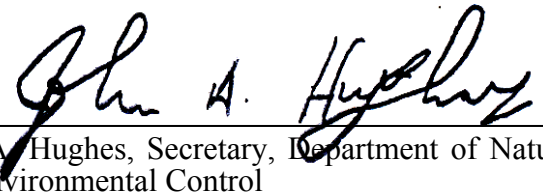
The EPA has recently proposed weaker reporting requirements for the TRI program. We have voiced opposition to those changes in this valuable program. A copy of our comment letter to the EPA opposing the proposed rule change is included in Appendix M of the 2004 TRI Data Detail Report. It can be accessed at: http://www2.state.de.us/serc/reports.shtml .

DNREC publishes this report to inform citizens about the environment in their communities. I urge you to take advantage of the information in this report to learn about the management of chemicals in your community. I also encourage our industrial citizens to continue to reduce releases below today's levels and focus on providing a safer and more healthful environment for our future.

The ***Other Sources of Information*** section of this report provides details about the many other DNREC and EPA Internet sites devoted to community right-to-know.

We continually strive to improve this report to the public, and we welcome comments on its format and readability.

Sincerely,



John A. Hughes, Secretary, Department of Natural Resources and Environmental Control

INTRODUCTION

This report reflects the third phase of environmental management since the industrial revolution began several decades ago.

First, chemicals became more diverse and widespread in our communities, especially during the last 60 years. Second, society and government responded to concerns with traditional regulations designed to control the potential harm to communities, human health, and the environment by chemicals. Third, in response to recognition by industries and communities that traditional regulation was not as effective as desired, a fundamental "Right to Know" has emerged in work places and in the broader community. Recognition of the value of information and the power that the public and employees can apply through the use of public and worker right to know has lead to a series of laws requiring simple reporting of the use and release of hazardous substances.

For example, Philadelphia enacted the nation's first "Right to Know" law in 1981. In 1986, Congress created the Toxics Release Inventory (TRI) as part of the Superfund Amendments and Reauthorization Act (SARA) to ensure that toxic chemicals are managed and used safely and responsibly by the manufacturing industries and other facilities. Delaware and DNREC support this program, and collect and distribute TRI data to the public each year.

The fact that companies must report on the amount of toxic chemicals they release into the environment has, by itself, caused significant reductions in TRI environmental releases over the years. The downward trend for total TRI chemical waste continued in 2004. However, some of the on-site reductions were offset by increases from other facilities, causing the total amount of state-wide on-site releases to increase in 2004. We hope that, with the help of industry and interested citizens, reductions in the amounts of on-site releases of TRI chemicals will resume next year.

This year's report focuses in part on the releases of the persistent, bioaccumulative and toxic chemicals known as PBT's, because this is only the fifth year that these chemicals have been reported at lower thresholds.

The Department of Natural Resources and Environmental Control (DNREC) hopes that the information presented in this report will benefit Delaware citizens by improving their awareness and promoting their involvement in environmental issues in their communities.

This report provides a summary of the toxic chemicals handled by Delaware facilities in 2004 and associated data reported to the TRI program.

WHAT IS THE TOXICS RELEASE INVENTORY?

The **Toxics Release Inventory**, or **TRI**, is a collection of data that contains information about toxic chemicals that are manufactured or used by some, but definitely not all, facilities in the United States. See page 4 for details on who must report to the TRI program. This information is reported each year by the facilities to the states where they are located, and to the U.S. Environmental Protection Agency (EPA). This information is available to the public through this report and a more technical report published by Delaware's Department of Natural Resources and Environmental Control (DNREC). In addition, the EPA publishes TRI reports, and the data is available through state and federal internet sites. The TRI program was established in 1986 to provide information to the public about the presence and release of toxic chemicals in their communities. It is part of the Emergency Planning and Community Right-to-Know Act (EPCRA).

The EPCRA Reporting Program maintains a database that is updated as new reports are received. The database currently contains seventeen years of data. Most chemical releases reported under TRI are also regulated through Federal and/or State permits.

This report provides a summary of the 2004 TRI data and revisions received as of December 1, 2005 from Delaware facilities.

WHY IS THERE A NEED FOR THIS PROGRAM?

A dramatic and fatal accident involving the release of a large quantity of methyl isocyanate gas occurred in Bhopal, India on December 3, 1984. Because of this release and similar, less tragic, accidents that occurred in the United States, Congress enacted the Emergency Planning and Community Right to Know Act (EPCRA). The purpose of this Act is to give citizens information about the chemicals present in their communities, and improve the ability of facilities and local emergency agencies to plan for and respond to chemical emergencies. EPCRA established a number of reporting requirements for facilities and businesses. In 1991, Delaware established its own EPCRA legislation that enhanced the federal requirements.

WHAT IS A TOXIC CHEMICAL?

A toxic chemical is one that meets any of several standards for serious or significant potential to harm human, fish, or animal life, or to be harmful to the environment. There are now 581 chemicals and an additional 30 chemical categories, such as mercury compounds, polycyclic aromatic compounds (PAC's), and Dioxin and Dioxin-like compounds, on the TRI chemical list. Of these chemicals and compounds, about 102 are currently reported in Delaware.

WHO MUST REPORT TO THE TRI PROGRAM?

Not every facility in Delaware reports to the TRI program. There are three requirements a facility must meet before reporting is required.

1. Only facilities that have 10 or more full time employees are required to report.

2. A facility must be doing business as a manufacturer or processor, generate electric power, or distribute bulk petroleum products. All federal facilities are also required to report.
3. A facility must manufacture or process one of the chemicals on the TRI list in quantities greater than a minimum threshold value. This value is generally 25,000 pounds for Manufacturing and Processing, and 10,000 pounds for the Otherwise Use category. There are lower threshold values for chemicals known as Persistent, Bioaccumulative Toxins (PBT's). Some facilities are able to report some chemicals on a short form (Form A) if the reportable amount of that chemical meets certain criteria. No amounts are reported on Form A, but the facility indicates that it manufactured, processed, or otherwise used less than the threshold amount of the chemical during the year.

HOW DO WE GET THE DATA?

Each year by July 1, facilities report on each chemical that meets the reporting threshold. Each chemical report is on a 5-page form that details the type and amount of on-site release, off-site transfer, or on-site waste management activity the chemical has experienced during the prior calendar year. The facilities report this data to DNREC and to the EPA.

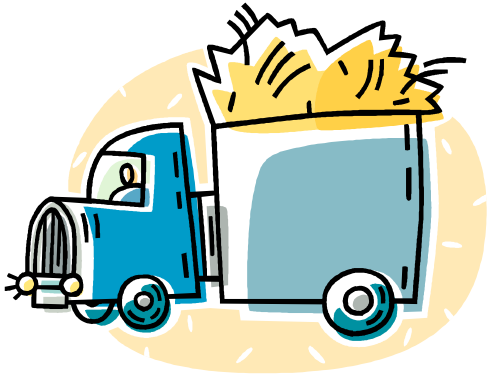
DNREC and EPA check the data for completeness and accuracy, including comparing it with data reported to other programs.

DNREC also visits some of the facilities to get a better understanding about the process at the facility and the reasons for specific chemical use. In addition, DNREC and EPA may audit a facility if they suspect that reporting was not accurate. Both DNREC and the EPA publish reports on the data. These reports, such as this one, are available to the public.

TYPES OF TRI DATA

TRI chemical data is reported in several categories. Table 1 on the next page lists all the categories of data reported to Delaware and EPA under the TRI program.

On-Site Releases: On-site releases in Delaware are to **air, water,** or **land**. The **air** release category includes exhaust air collected by vents, ducts, or pipes, as well as air escaping into the general facility atmosphere. **Water** releases are to streams or water bodies, including rivers, lakes, oceans and bays at the facility site. This includes releases from sources such as industrial process outflow or open trenches and storm water runoff. **Land** releases go to landfills, hazardous waste landfills, surface impoundments (uncovered holding areas used to evaporate and/or settle waste materials), other land disposal such as waste piles or releases, and land application or treatment in which waste containing a TRI chemical is applied to or incorporated into soil or land at the facility.



Off-Site Transfers: Off-site transfers include transfer of chemical waste to **POTW's** (Publicly Owned Wastewater Treatment Plants), to **recycle** operations, to **energy recovery** operations, to **treatment** operations, and to **disposal.** These transfers are to other facilities that are permitted to accept the waste from the facility that generates it.

On-site waste Management:
Waste management operations at the facility generating the waste include **recycling, energy recovery, and treatment.** These are the same as described above in Off-Site Transfers, but occur on-site.

2004 DATA SUMMARY

Table 1 shows statewide totals of 2004 TRI on-site releases, off-site transfers, and wastes managed on-site. These different categories are discussed in the previous section and below.

Seventy-two facilities submitted 354 reports on 102 different chemicals. As in past years, air releases constitute the largest portion of the total on-site releases. On-site releases of all TRI chemicals were higher by 8% compared to 2004, primarily because one electricity generating facility had a 25% increase in production of its electricity. This 912,409 pound increase more than accounted for the 757,083 pound increase Statewide.

TABLE 1

2004 TRI DATA SUMMARY

(IN POUNDS)

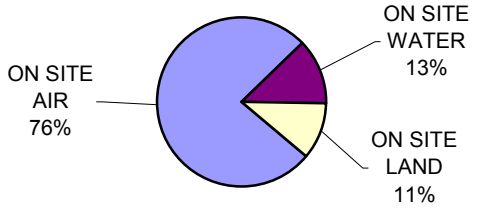
	2004
No. of facilities	72
No of Form A's	52
No of Form R's	302
No. of Chemicals	102
On-site Releases	
Air	7,935,591
Water	1,298,993
Land	1,111,392
Total Releases	10,345,976
Off-site Transfers	
POTW's	1,433,310
Recycle	9,841,412
Energy Recovery	2,755,903
Treatment	179,969
Disposal	3,917,032
Total Transfers	18,127,625
On-site Waste Mgmt.	
Recycle	8,772,135
Energy Recovery	23,595,635
Treatment	31,619,848
Total on-site Mgmt.	63,987,618
Total Waste	92,461,219

Source: DNREC 2004 TRI Database, 12-1-05

ON-SITE RELEASES

On-site releases are emissions to the air, water, or land environment at the facility site. Figure 1 shows the amounts of all TRI chemicals released on-site for all Delaware TRI facilities.

FIGURE 1
2004 ON SITE RELEASES



TOTAL: 10,345,976 POUNDS

Of all the TRI chemicals released to air, hydrochloric acid and sulfuric acid make up about 79% of the total releases to air. These acid gasses are almost entirely generated by the power plants at Indian River, Edge Moor/Hay Road and the Premcor refinery. These same chemicals

make up about 58% of the total on-site releases to air, water, and land combined.

On-site releases to water consist mostly of nitrate compounds from the Invista Seaford, Perdue Georgetown and Premcor facilities. Although these facilities are large producers of nitrate compounds, there are several other nitrate-producing facilities in Delaware that are not subject to the TRI program.

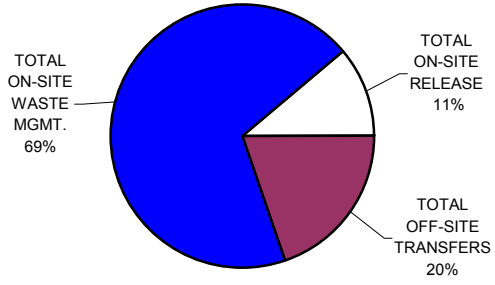
Releases to land on-site are almost all metallic compounds such as barium, vanadium, lead, nickel, manganese, chromium, copper, and zinc compounds. The power plants at Indian River, Edge Moor, Invista, and at the Motiva/Premcor refinery generate these metallic compounds in ash from impurities in the fuels that they burn.

TOTAL WASTE

The relative amounts of all TRI chemical wastes from the three main categories in Table 1 are shown in Figure 2, where you can see the percentage contribution of the on-site releases, off-site transfers, and on-site waste management.

Table 1 and Figure 2 show that on-site releases make up only about 11% of the total waste reported to the TRI program. Other data, including transfers off-site and waste managed on-site are discussed in more detail in the *2004 TRI Data Detail Report* available from DNREC.

FIGURE 2
TOTAL TRI WASTE



TOTAL: 92,461,219 POUNDS

LIMITATIONS OF TRI DATA

In addition to the fact that not all facilities are required to report to the TRI program, there is an important thing to keep in mind:

THIS DATA DOES NOT INDICATE THE AMOUNT, IF ANY, OF HUMAN EXPOSURE OR HOW SEVERE IT MIGHT BE.

TRI data does not provide an indication of actual or potential exposure to the reported releases and cannot be used by itself to determine the impact on your health. Factors such as the chemical's release rate, the toxicity of the chemical, where the chemical enters the environment and its proximity to nearby communities must be fully considered when assessing exposure to the chemical. A small release of a highly toxic chemical near a large community may be a greater risk than a large release of a less toxic chemical in a remote area.

WHAT IS A PERSISTENT, BIOACCUMULATIVE TOXIC CHEMICAL?

Certain chemicals are more toxic to humans, animals, and the environment than others, and some remain in the environment much longer than others before they are destroyed by natural processes (if they are destroyed at all). In addition, some chemicals tend to accumulate in bodies of humans, fish, and animals rather than being destroyed or eliminated. These chemicals, if they meet certain standards, are classified as Persistent, Bioaccumulative Toxic (PBT) chemicals. Metals, as elements, are neither created nor destroyed. They can, however, change form in nature or industry as they combine with other elements to become chemicals or compounds that may be classified as PBT's. If these PBT chemicals are manufactured, processed, or otherwise used above the reporting threshold amounts shown in Table 2, they are reportable to the TRI program. Because of the increased hazards associated with these substances, their thresholds are much lower than the basic thresholds applied to other, non-PBT substances. The total amounts released on-site for these PBT substances are shown in Table 3 on the next page.

TABLE 2
PBT CHEMICALS AND REPORTING THRESHOLDS
(pounds/year)

Chemical or Chemical Category	Reporting Threshold
Aldrin	100
Benzo[g,h,I]perylene	10
Chlorodane	10
Dioxin and dioxin-like compounds	0.1 grams
Heptachlor	10
Hexachlorobenzene	10
Isodrin	10
Lead *	100
Lead and lead compounds *	100
Mercury	10
Mercury compounds	10
Methoxychlor	100
Octachlorostyrene	10
Pendimethalin	100
Pentachlorobenzene	10
Polychlorinated biphenyls (PCB's)	10
Polycyclic aromatic compounds	100
Tetrabromobisphenol A	100
Toxaphene	10
Trifluralin	100

* Lower Threshold Starting In 2001

DATA FOR PERSISTENT BIOACCUMULATIVE TOXICS

In 2000, the EPA required reporting at much lower threshold levels on a class of chemicals known as persistent, bioaccumulative, toxics (PBT's). Table 2 on page 8 shows

the new thresholds. In 2001, lead and lead compounds, already on the TRI chemical list, were added to the PBT list, and their reporting thresholds were reduced. PBT's are receiving increased attention because we are learning that they remain in the environment for a long time and may not be readily destroyed by nature. PBT's may also move up the food chain without being destroyed and accumulate in body tissues. Table 3 shows the reported on-site release amounts for PBT's for 2001-2004. The PBT chemicals made up a small part, about 0.3%, of the total on-site releases for 2004. Although PBT's were reportable in 2000, the addition of lead and lead compounds in 2001 greatly increased (by over 27,000 pounds) the total amount of reportable PBT's that year. The 2001-2004 data reported here includes lead and uses consistent reporting criteria. The 2004 reported on-site releases of PBT's are 17% higher compared to 2003 because higher amounts of lead compounds were sent to the Indian River Power Plant on-site landfill. The 2004 reported PBT's are 3% more than the 2001 amounts. Reporting PBT's on the TRI short Form A is not allowed.

TABLE 3
2001-2004 TRI PBT DATA SUMMARY
(IN POUNDS)

	2001	2002	2003	2004
No. of facilities	23	32	28	25
No. of Form R's	51	66	62	59
No. of Chemicals	12	11	11	11
On-site Releases				
Air	5,681	5,282	4,938	3,761
Water	3,659	784	311	1,002
Land	21,852	17,166	22,116	27,356
Total Releases	31,192	23,232	27,365	32,118

Source: DNREC 2004 TRI Database, 12-1-05

WHAT IS A CARCINOGENIC CHEMICAL?

Some chemicals are known to or suspected to cause cancer in humans. These chemicals are called carcinogens. Table 4 shows the chemicals on the TRI list that are identified as carcinogens and were reported in Delaware for 2004. Table 4 also shows the number or reports that were received by the TRI program in Delaware for each of these chemicals.

DATA FOR CARCINOGENIC CHEMICALS

Table 5 shows data for carcinogens reported to TRI in Delaware since 1998. Additional detail on carcinogens can be found in the longer, more technical 2004 TRI Data Detail Report available from DNREC.

TABLE 5

1998-2004 Carcinogens

On-Site Releases in Pounds

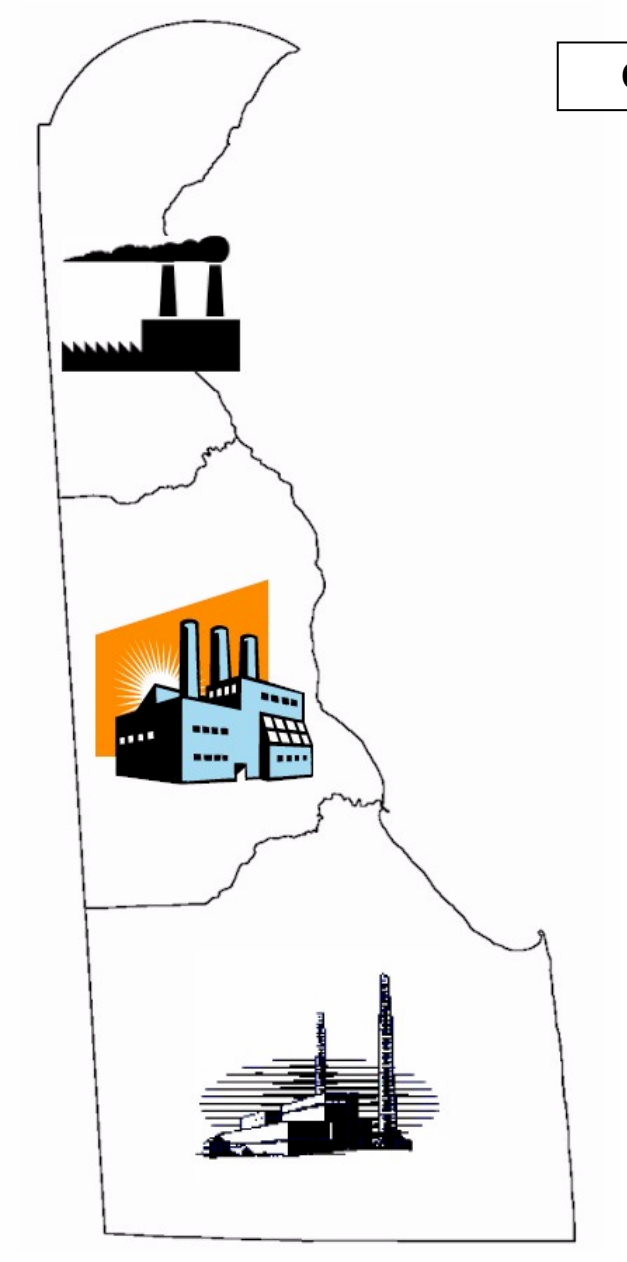
	1998	1999	2000	2001	2002	2003	2004
AIR	430,072	545,769	401,192	345,472	402,350	245,676	221,226
WATER	11,421	3,338	4,666	13,987	11,791	10,773	12,129
LAND	415,418	306,772	258,048	190,804	187,549	334,290	222,680
TOTAL ON-SITE	856,911	855,879	663,906	550,263	601,690	590,739	456,035

TABLE 4
CARCINOGENS REPORTED BY DELAWARE FACILITIES FOR 2004

CHEMICAL NAME	NO. OF REPORTS
1,3-BUTADIENE	2
1,3-DICHLOROPROPYLENE	1
4,4'-METHYLENEBIS(2-CHLOROANILINE)	1
ACRYLONITRILE	1
BENZENE	6
CHROMIUM COMPOUNDS	10
COBALT COMPOUNDS	3
DICHLOROMETHANE	1
DIETHYL SULFATE	1
ETHYL ACRYLATE	2
ETHYLBENZENE	5
ETHYLENE OXIDE	2
FORMALDEHYDE	1
HEXACHLOROBENZENE	1
LEAD	3
LEAD COMPOUNDS	12
NAPHTHALENE	6
NICKEL	3
NICKEL COMPOUNDS	7
NITROBENZENE	1
P-CHLOROANILINE	1
POLYCHLORINATED BIPHENYLS (PCB)	1
POLYCYCLIC AROMATIC COMPOUNDS	13
PROPYLENE OXIDE	1
STYRENE	6
TETRACHLOROETHYLENE	1
TOLUENE DIISOCYANATE (MIXED ISOMERS)	2
TRICHLOROETHYLENE	2
VINYL ACETATE	2
VINYL CHLORIDE	1
TOTAL =	99

FIGURE 3

ON-SITE RELEASES BY COUNTY



NEW CASTLE

Air Releases = 3,528,937 Pounds
Water Releases = 511,568 Pounds
Land Releases = 231,711 Pounds
Total On-Site Releases = 4,272,276 Pounds
201 Reports , 31 Facilities
41% of Statewide Releases

KENT

Air Releases = 103,560 Pounds
Water Releases = 0 Pounds
Land Releases = 0 Pounds
Total On-Site Releases = 103,560 Pounds
56 Reports, 17 Facilities
1% of Statewide Releases

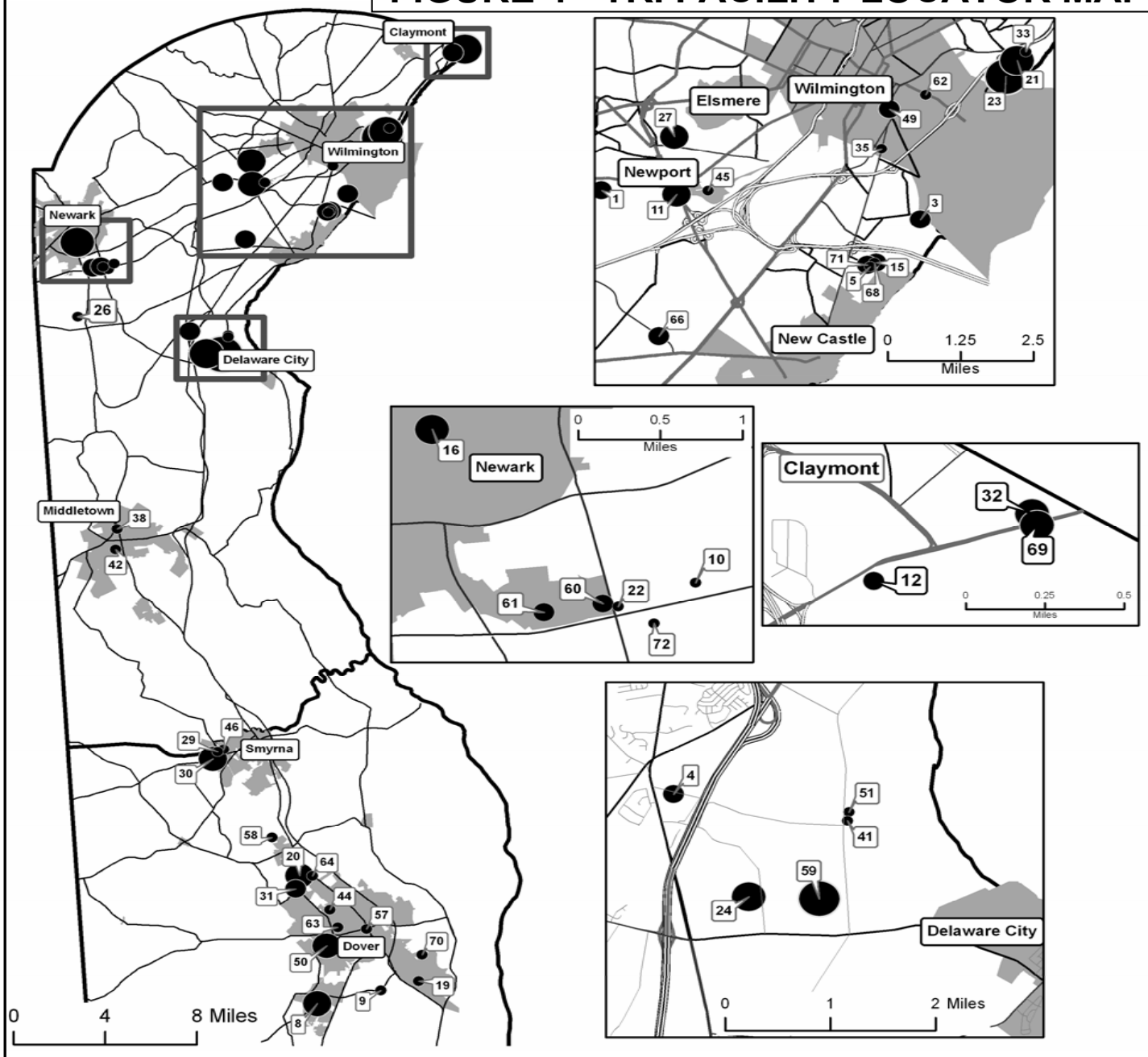
SUSSEX

Air Releases = 4,303,094 Pounds
Water Releases =787,425 Pounds
Land Releases = 879,621 Pounds
Total On-Site Releases = 5,970,140 Pounds
97 Reports, 24 Facilities
58% of Statewide Releases

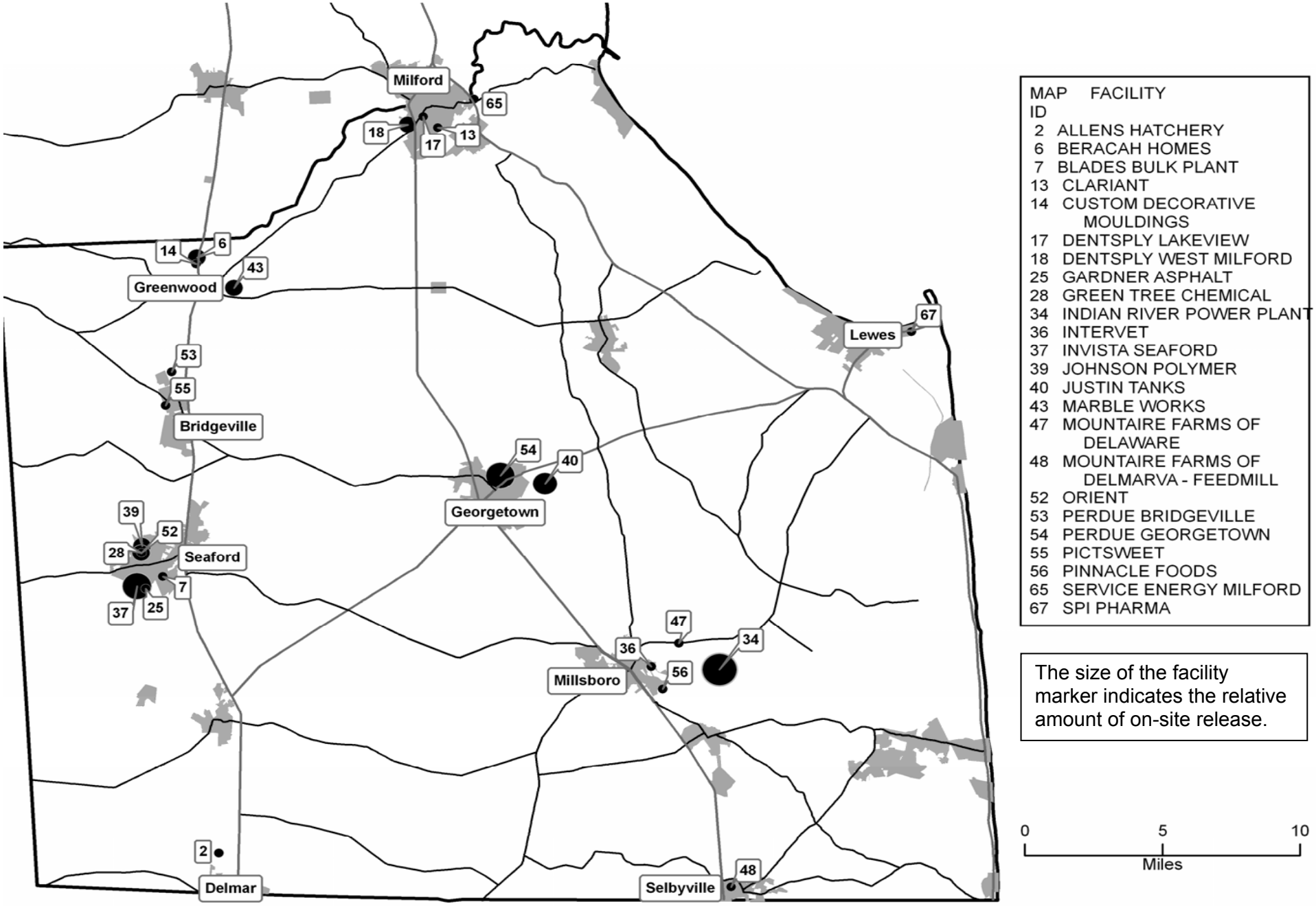
The maps and indexes on the next 2 pages show where TRI facilities are located, and Figure 3 on this page summarizes data about the TRI releases for each county.

Source: DNREC TRI Database 12-1-05

FIGURE 4 - TRI FACILITY LOCATOR MAP 2004



MAP ID	FACILITY
1	AGILENT TECHNOLOGIES NEWPORT
3	AMERICAN MINERALS
4	ARLON
5	AVECIA
8	CAMDEL METALS
9	CARL KING
10	CHROME DEPOSIT
11	CIBA SPECIALTY CHEMICALS
12	CITISTEEL
15	CYTEC
16	DAIMLERCHRYSLER
19	DOVER AFB
20	DOW REICHHOLD
21	DUPONT EDGE MOOR
22	E-A-R
23	EDGE MOOR/HAY ROAD POWER PLANTS
24	FORMOSA PLASTICS
26	GE ENERGY
27	GENERAL MOTORS
29	HALKO MFG.
30	HANOVER FOODS
31	HIRSH INDUSTRIES
32	HONEYWELL
33	IKO
35	INSTEEL WIRE
38	JOHNSON CONTROLS
41	KUEHNE CHEMICAL
42	MACDERMID
44	MCKEE RUN POWER PLANT
45	MEDAL
46	METAL MASTERS
49	NORAMCO
50	NRG DOVER
51	OCCIDENTAL CHEMICAL
57	PLAYTEX PRODUCTS
58	PPG DOVER
59	PREMCOR
60	ROHM & HAAS
61	ROHM & HAAS TECH CENTER
62	ROLLER SERVICE
63	SARA LEE APPAREL
64	SERVICE ENERGY DOVER
66	SPATZ FIBERGLASS
68	SPI POLYOLS
69	SUNOCO
70	SUNROC
71	UNIQEMA
72	VP RACING FUELS

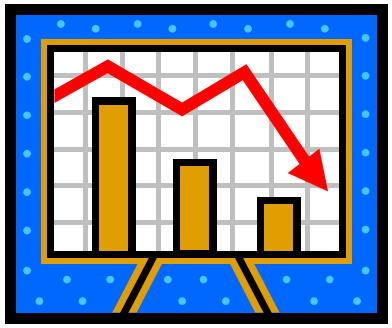


MAP ID	FACILITY
2	ALLENS HATCHERY
6	BERACAH HOMES
7	BLADES BULK PLANT
13	CLARIANT
14	CUSTOM DECORATIVE MOULDINGS
17	DENTSPLY LAKEVIEW
18	DENTSPLY WEST MILFORD
25	GARDNER ASPHALT
28	GREEN TREE CHEMICAL
34	INDIAN RIVER POWER PLANT
36	INTERVET
37	INVISTA SEAFORD
39	JOHNSON POLYMER
40	JUSTIN TANKS
43	MARBLE WORKS
47	MOUNTAIRE FARMS OF DELAWARE
48	MOUNTAIRE FARMS OF DELMARVA - FEEDMILL
52	ORIENT
53	PERDUE BRIDGEVILLE
54	PERDUE GEORGETOWN
55	PICTSWEET
56	PINNACLE FOODS
65	SERVICE ENERGY MILFORD
67	SPI PHARMA

The size of the facility marker indicates the relative amount of on-site release.

FIGURE 4 - TRI FACILITY LOCATOR MAP 2004

TRENDS OVER TIME



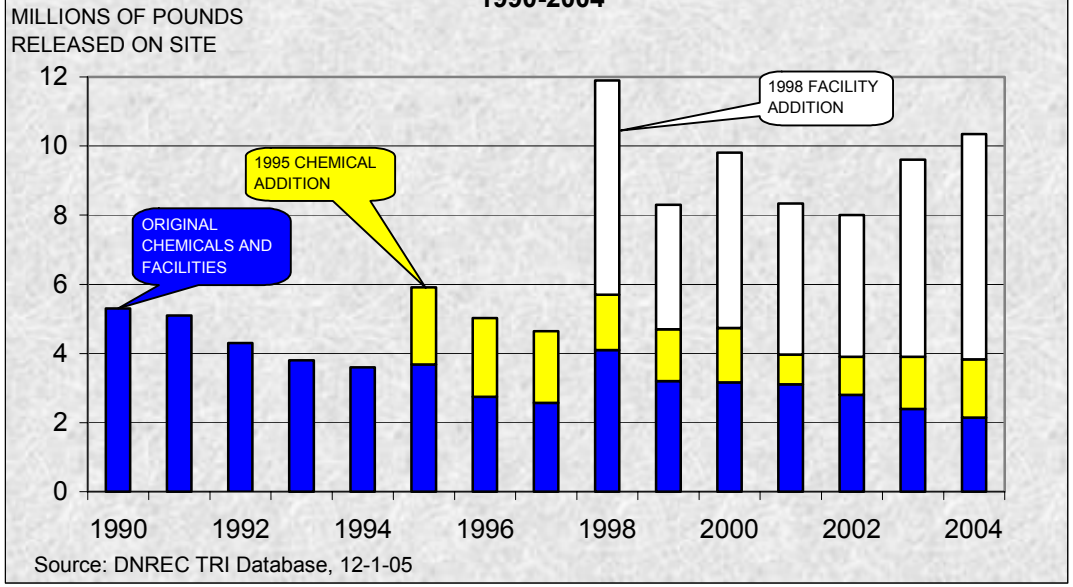
In addition to the reported releases for the latest year, DNREC also looks at how the releases are changing over time. If a type of release is trending up or down, we will look for reasons why. It may be because a new group of chemicals, such as the PBT's, is now being reported. It may be that a facility has changed the way it estimates the release because it found a more accurate way to do this, and the actual release may not have changed very much. Whatever the reason, we look at trends as long-term indicators for the way activity is changing. We also look at trends for potential issues that need investigation.

The EPA also adds chemicals and facilities to the TRI program when it discovers chemicals that are significant toxics or that some facilities as a group tend to manufacture or use toxic chemicals. Figure 5 shows the trend of the on-site releases since 1990. This graph shows the result of adding chemicals and facilities and industry efforts to reduce releases. Usually a few chemical are added or deleted every year and they are included in the totals for that year.

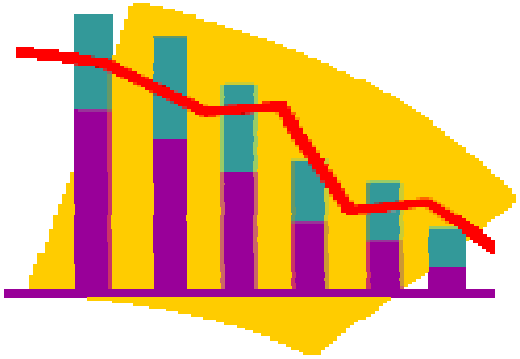
Since 1990, on-site releases of facilities and chemicals in the original TRI program list have trended down over time.

In 1995, a group of chemicals was added and the total number of chemicals increased to 667 from the 365 reportable in 1994. This group has also trended down since it was added in 1995. The combined amount of on-site releases of the original facilities and chemicals and the chemicals added in 1995 is now

FIGURE 5
TREND OF ON-SITE RELEASES
1990-2004



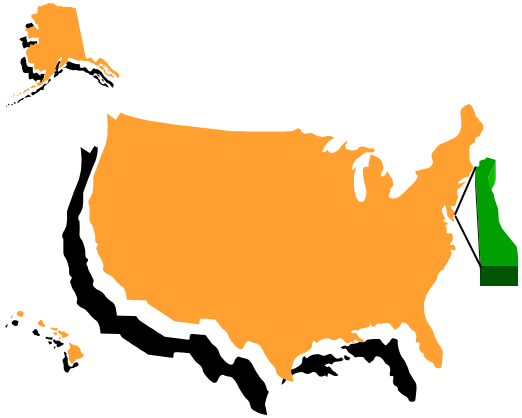
lower than the original facilities and chemicals in 1990.



In 1998, a group of facilities was added. This group included electric generating facilities, as well as some chemical and petroleum distribution facilities. One facility in the 1998 group improved the accuracy in the way it calculates one of its on-site release amounts in 2003, and its 1,700,000-pound increase was the primary reason for the increased state total in 2003. This same chemical was directly affected by an increase in production in 2004, and the reported amount increased again. This caused the 1998 Facility Addition group to become higher than its original reported amount for the first time.

If each group had remained constant at its original reported amount, the amounts reported today would be 13.7 million pounds instead of the 10.3 million pounds actually reported. We hope that this downward trend will continue.

NATIONAL PERSPECTIVE



Because Delaware is a small state, it may be helpful to see how it compares to other states and to the nation.

At the time of this report, the EPA has not released the national 2004 TRI report, so we could not compare our 2004 data with the national 2004 data. However, we did compare our data with the 2003 national data. Following are highlights from this comparison:

1. Delaware ranks 42nd in the nation for total on-site releases.

2. Forty-seven facilities in the nation each released more on-site individually that all the facilities in the State of Delaware combined.

3. Delaware provided 0.26% of the total on-site release amounts in the nation.

Some facilities in Delaware rank at or near the top of the national rankings for specific releases.

DuPont Edge Moor ranks #1 in the nation for off-site transfer of dioxin and dioxin-like compounds.

Formosa Plastics ranks #4 in the nation for on-site release of vinyl chloride and #16 in the nation for on-site release of vinyl acetate.

Premcor ranks #19 for on-site release of hydrogen cyanide and #23 for cyanide compounds.

Occidental Chemical has now closed their mercury-based

operation, but in 2004 the facility ranked #28 for total on-site release of mercury and #34 for on-site air release of mercury.

DaimlerChrysler ranks #23 for on-site release of n-methyl-2-pyrrolidone and #37 for 1,2,4-trimethylbenzene.

The **Indian River Power Plant** ranks #48 for on-site release of hydrochloric acid.

These rankings may change when the 2004 data is published, as the new data may be greater than or less than the 2003 data for a specific comparison.

EPA-PROPOSED CHANGES TO THE TRI PROGRAM AND THE DNREC RESPONSE

The EPA has proposed a change to the TRI reporting requirements for the short Form A. No amounts are reported on Form A, only that the facility manufactured, processed, or otherwise used the chemical at its facility. The proposed change would:

1. Increase the Form A total waste amount reporting threshold to 5,000 pounds, up from the current 500 pounds for non-PBT reporters. Waste amounts above the threshold are reported, along with other details, on Form R.
2. Allow reporting of PBTs, except dioxins, on Form A if no release or disposal activities occur, but at the current 500 pound threshold. Reporting of PBTs on Form A is currently not allowed.

DNREC opposes this proposal for the following reasons:

1. We believe that the proposed rule is inconsistent with the 2000-2001 expansion of PBT reporting, which provides more information to communities where chemicals are used.
2. Although EPA claims this is an incentive to reduce TRI waste, we believe that it is not. The proposal allows increased waste generation, up to the 5,000-pound threshold, without reporting exact amounts.
3. We believe that there will be a loss of data associated with the possible conversion of standard Form R) reports to the short Form A reports (35% of the Form R reports filed in 2004).
4. A small release does not mean a small risk. Some non-PBT chemicals are highly toxic, and the loss of data contained in the current Form R reports could be significant to communities where small amounts of these chemicals are used and possibly released.

Appendix M in the 2004 TRI Data Detail Report contains the full text of the DNREC response to this proposal.

The EPA has also indicated that, in 2006, it will propose changing TRI reporting to every other year instead of every year. We do not yet have any details regarding this proposal, but, because of the potential loss of data, it is likely that DNREC will oppose this proposal as well. Details will be published on EPA's TRI home page. The link to this page can be found in the ***Other Sources of Information*** section on page 17.

OTHER SOURCES OF INFORMATION

Information about TRI and related programs is available from several additional sources. Some of these sources are shown below.

Access to the TRI Files - DNREC is responsible for collecting, processing, and distributing information submitted by Delaware facilities under the TRI program.
The 1998-2004 TRI annual reports may be viewed at: http://www2.state.de.us/serc/reports.shtml. Additional details and information not contained in the reports are available to the public through the EPCRA Reporting Program located within DNREC. A searchable database is located at: http://www2.state.de.us/serc/services/search/index.shtml .

Delaware's Department of Natural Resources and Environmental Control has publications, reports, and information available for a wide variety of programs at: http://www.dnrec.delaware.gov/info/ELibrary.htm .
In addition to TRI reports, there are other provisions of the Emergency Planning and Community Right to Know Act (EPCRA) that provide information to the public and to local emergency planning and response organizations. For additional information, visit the Delaware EPCRA website at: http://www2.state.de.us/serc/default.shtml .

EPA's TRI Home Page - The TRI home page provides information on the many facets of the TRI program at EPA, including an Executive Summary, Q&A's, a link now to the 2002 TRI data, and later this year to 2004 data, a current list of reportable chemicals, reporting forms, state and federal program contacts, and various guidance documents available for downloading. This website has many links to other EPA and non-EPA sites associated with TRI. www.epa.gov/tri/ .

Toxics Release Inventory Public Data Release - EPA's annual TRI report. It covers information nationwide and provides a good perspective on how Delaware compares to other states www.epa.gov/tri/tridata/index.htm . The 2004 edition of this report will be available later this year and will be available for review at the DNREC office at 156 South State Street in Dover. It can also be obtained by calling the federal EPCRA Hotline at 1-800-535-0202.

Right-to-know Network - Searchable nationwide TRI data is available through RTKNet. The RTKNet was established by two non-profit organizations to provide access to TRI and chemical data, link TRI with other environmental data, and exchange information among public interest groups. www.rtk.net .

Delaware Public Health Cancer Rates and Causes - This site provides data and answers to many cancer-related questions.
http://www.state.de.us/dhss/dph/dpc/cancer.html .

Delaware
Toxics Release Inventory

Delaware Department of Natural Resources and Environmental Control

Emergency Planning and Community Right to Know Program
156 South State Street
Dover, Delaware 19901
302-739-9405

Doc. No. 40-09-03\06\01\01